

What is claimed is:

- 1           1.       A junction assembly for use at a junction between a lateral branch and a main  
2 well bore, comprising:  
3               a template having a lateral window for positioning proximal the junction;  
4               a connector adapted to be sealably engaged to the template, a portion of the  
5 connector extending through the lateral window; and  
6               plural flow paths comprising a first flow path in communication with the lateral  
7 branch, and a second flow path in communication with a portion of the main well bore.
- 1           2.       The junction assembly of claim 1, further comprising a flow control assembly  
2 coupled to the flow paths to control fluid flow through the flow paths.
- 1           3.       The junction assembly of claim 2, wherein the flow control assembly comprises a  
2 Y-shaped flow device.
- 1           4.       The junction assembly of claim 2, wherein the flow control assembly comprises  
2 valves adapted to control flow in the flow paths.
- 1           5.       The junction assembly of claim 4, wherein the valves are adapted to be  
2 independently controlled.
- 1           6.       The junction assembly of claim 4, wherein the valves are adapted to be remotely  
2 operable.
- 1           7.       The junction assembly of claim 1, wherein the plural flow paths comprise  
2 separate flow conduits.
- 1           8.       The junction assembly of claim 7, wherein the plural flow conduits are isolated  
2 from each other.

1           9.     The junction assembly of claim 7, wherein the main well bore extends from a well  
2 surface, and wherein the separate flow conduits extend substantially to the well surface.

1           10.    The junction assembly of claim 1, wherein the second flow path is adapted to  
2 extend below the junction for communication with the portion of the main well bore located  
3 below the junction.

1           11.    The junction assembly of claim 1, wherein one of the first and second flow paths  
2 includes an annular path around the other one of the first and second flow paths.

1           12.    The junction assembly of claim 1, further comprising a connection assembly  
2 adapted for positioning below the junction, the connection assembly adapted to sealably engage  
3 the first flow path.

1           13.    The junction of claim 12, wherein the first flow path comprises a first flow  
2 conduit, and the connection assembly comprises a seal bore to sealably receive the first flow  
3 conduit.

1           14.    The junction assembly of claim 13, wherein the connection assembly comprises  
2 another seal bore to sealably receive the template.

1           15.    The junction assembly of claim 1, wherein the plural flow paths comprise plural  
2 flow conduits, and the connector has a portion having an inner diameter to receive the plural  
3 flow conduits.

16. A method of completing a well having a junction between a lateral branch and a main bore, comprising:

1 installing a template having a lateral window proximal the junction;

2 sealably engaging a connector to the template;

3 providing a portion of the connector through the lateral window of the template;

4 and

5 providing plural flow paths comprising a first flow path to communicate with the

6 lateral branch, and a second flow path to communicate with a main bore section.

17. The method of claim 16, wherein providing the second flow path comprises  
2 providing the second flow path to communicate with the main bore section below the junction.

18. The method of claim 17, wherein providing the plural flow paths comprises  
providing plural flow conduits.

19. The method of claim 16, further comprising engaging a distal end of the  
connector with equipment in the lateral branch.

20. The method of claim 16, wherein the second flow path comprises a flow conduit,  
the method further comprising providing a connection assembly below the junction, and sealably  
engaging the flow conduit in the connection assembly.

21. The method of claim 20, further comprising sealably engaging the template in the  
connection assembly.

22. The method of claim 16, wherein the plural flow paths comprise plural flow  
conduits, the method further comprising coupling a flow control assembly to the flow conduits to  
control fluid flow through the flow conduits.

23. The method of claim 22, further comprising actuating valves in the flow control  
assembly to control fluid flow through the flow conduits.

1           24.     The method of claim 23, wherein actuating the valve comprises independently  
2     actuating the valves.

1           25.     The method of claim 23, wherein actuating the valves comprise remotely  
2     actuating the valves.

1           26.     The method of claim 22, wherein coupling the flow control assembly comprises  
2     coupling a Y-shaped flow device to the plural flow conduits.

1           27.     The method of claim 16, wherein providing the plural flow paths comprises  
2     installing at least one flow conduit through the template.

1           28.     The method of claim 16, wherein the main bore extends from a well surface, the  
2     method further comprising providing separate flow paths through the flow conduits to  
3     substantially the well surface.

1           29.     A completion system comprising:  
2             a lateral branch junction assembly for positioning proximal a junction of a lateral  
3     branch and a main well bore and comprising a template having a lateral window and a lateral  
4     branch connector adapted to sealably engage the template, a portion of the lateral branch  
5     connector extending through the lateral window,  
6             the lateral branch junction assembly further comprising at least a first flow path  
7     and a second flow path, the first flow path in communication with the lateral branch, and the  
8     second flow path adapted for communication with a main well bore section.

1           30.     The completion system of claim 29, wherein the second flow path is adapted for  
2     communication with the main well bore section below the junction.

1           31.     The completion system of claim 29, further comprising a flow control system  
2     adapted to control fluid flow through the flow paths.

32. The completion system of claim 29, wherein the second flow path comprises a flow conduit, and the lateral branch junction assembly further comprises a connection apparatus for sealably engaging the flow conduit and the template.

1 33. A junction assembly for use at a junction between a lateral branch and a main  
2 well bore, comprising:  
3 a first part adapted to sealably engage to a second part;  
4 the first and the second part adapted to be disposed proximal the junction;  
5 at least a portion of the second part extending into the lateral branch; and  
6 plural flow paths comprising a first flow path in communication with the lateral  
7 branch, and a second flow path in communication with a portion of the main well bore.